DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011320 Address: 333 Burma Road **Date Inspected:** 09-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No Yes N/A N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Assembly Yard

ZPMC informed dayshift QA personnel that ABF Inspectors have completed ultrasonic (UT) inspections of the bikepath side plates complete joint penetration butt welds between segments 5AE and 5BE and they are ready for QA ultrasonic inspections. This QA Inspector performed random ultrasonic for detection of longitudinal and planar transverse indications utilizing scanning pattern A, B, C and D (AWS D1.5 Fig 6.7) inspections of OBG segment 5AE weld OBE5A-04 from Y=1250 mm to Y=8245 mm (bottom). ABF has documented that they have identified ultrasonic rejections at locations 5200 mm and 5410 mm and this QA Inspector did not identify any additional ultrasonic rejections. Items observed on this date appeared to generally comply with applicable contract documents. Caltrans QA Inspector B270 performed ultrasonic inspections of the remainder of this weld between Y=0 mm to Y=1250 mm.

Blast Shop #1

This QA Inspector and Caltrans QA Inspector Mr. Goulet performed random visual inspections of the OBG

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

internal ceiling from the weld seam from panel point 50 to panel point 52 of OBG Segment 7BW as per ZPMC request number 2180, Document No. PR008 rev. #3. ZPMC has recently completed grit blasting of these areas and the steel surfaces are now mostly free of rust oxide and other contaminants that had previously obscured portions of the plate and weld surfaces. This QA Inspector visually observed approximately 50 locations that require grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, and other minor surface rejections. The areas were marked with colored chalk and ZPMC has several workers using grinders to remove the visually unacceptable areas and ZPMC has assigned a magnetic particle (MT) inspector to perform MT of the arc strike removal areas.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer